NOTES ON TONKINESE *CLAUSILIÆ*, WITH ILLUSTRATIONS OF SOME UNFIGURED FORMS, AND THE DESCRIPTION OF A NEW SPECIES.

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Read 11th April, 1902.

PLATE III.

RECENTLY I have examined a large series of specimens, some named by Dr. von Moellendorff and others needing determination, which were collected in Tonkin by Herr Fruhstorfer. It became necessary, for my own use, to compile a list of the forms recorded from the district, and I thought that the references, etc., might be of service, if published in an alphabetical list. In addition to those catalogued, one species, C. Dautzenbergi, will, I understand, be described by Dr. von Moellendorff, and I append the diagnosis of another, C. Chiemhoaensis, which appears to me to be new. The present opportunity has also been taken to illustrate a number of species and forms, described but not figured by Dr. von Moellendorff. Localities given in the following references without any recorder's name are those cited in the original descriptions of the forms; the letter (F.) denotes unpublished localities due to the energy of Herr Fruhstorfer.

Geographically the country is not well defined, but may, I think, be taken broadly as the region watered by the Song-Ka.

LIST OF SPECIES.

1. ARDOUINIANA, Heude.

Clausilia Ardoniniana, Heude: Moll. terr. Fleuve-Bleu, 1882, p. 118, pl. xxi, fig. 4. Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 50, pl. iii, fig. 3.

Synonym: Nenia horrida, Mabille: Moll. Tonk. diagn., 1887, p. 16; Bull. Soc. Malac. France, 1887, vol. iv, p. 109, pl. iii, figs. 9, 10.

Hab.—Baie d'Along (B. & D.).

2. Auricoma, Bav. & Dtz.

Clausilia auricoma, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 277, pl. xii, fig. 2.

Hab.—Cha-Ra and Lakes Ba-Bé.

3. Babeensis, Bav. & Dtz.

Clausilia Babeensis, Bayay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 278, pl. xii, fig. 3.

Hab.—Lakes Ba-Bé.

4. Backanensis, Bav. & Dtz.

Clausilia Backanensis, Bavay & Dautzenberg: Journ. de Conchyl.,
1899, vol. xlvii, p. 281, pl. xii, fig. 5.

Hab.—Bac-Kan.

5. BILLETI, H. Fischer.

Clausilia Billeti, H. Fischer: Bull. Sci. France Belgique, 1898, vol. xxviii, p. 324, pl. xviii, figs. 28-31.

Hab.—Déo-Ma-Phue.

6. CALLISTOMA, Bav. & Dtz.

Clausilia callistoma, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 41, pl. ii, fig. 3.

Hab.—From Lang-Son to That-Ké.

7. CALLISTOMELLA, Bav. & Dtz.

Clausilia callistomella, Bavay & Dautzenberg: Journ. de Conchyl., 1900, vol. xlviii, pp. 115, 447, pl. x, fig. 8.

Hab.—Bae-Kan.

8. Coudeini, Bav. & Dtz.

Clausilia Coudeini, Bayay & Dautzenberg: Journ. do Conchyl., 1899, vol. xlvii, p. 42, pl. ii, fig. 4.

Hab.—Between Lang-Son and That-Ké.

9. DICHROA, Bav. & Dtz.

Clausilia dichroa, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 287, pl. xii, fig. 8.

Hab.—Bac-Kan.

10. DIPLOCHEILUS, Mlldff. (Pl. III, Fig. 3.)

Phædusa (Hemiphædusa) diplocheilus, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 77.

Hab .- Mauson Mts.

11. Dorri, Bav. & Dtz.

Clausilia Dorri, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 283, pl. xii, fig. 6.

With varieties elongata, minor, cristata.

Hab.—Near Lakes Ba-Bé.

12. Duella, Mabille.

Clausilia duella, Mabille: Moll. Tonk. diagn., 1887, p. 16; Bull. Soc. Malac. France, 1887, vol. iv, p. 115. Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 46, pl. i, fig. 7.

Hab.—Between Lang-Son and That-Ké (B. & D.).

13. EUPLEURA, Bav. & Dtz.

Clausilia eupleura, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 291, pl. xii, fig. 11.

Hab.—That-Ké.

14. FALCIFERA, Bav. & Dtz.

Clausilia falcifera, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 290, pl. xii, fig. 10.

Hab.—Between Bae-Kan and That-Ké.

Subsp. MONTANA, Mlldff.

Phædusa fulciformis [sic], subsp. montana, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 77.

Hab. - Mauson Mts.

15. FARGESIANA, Hde.

Clausilia Fargesiana, Heude: Mem. Hist. Nat. Emp. Chinois, 1885, vol. iii, p. 119, pl. xxxi, fig. 3. Mabille: Bull. Soc.

Malac. France, 1887, vol. iv, p. 111.

The reference given by Bavay & Dautzenberg (Journ. de Conchyl., vol. xlvii, p. 45, pl. ii, fig. 6) relates to the shell which Dr. von Moellendorff is about to describe as *C. Dautzenbergi*.

Hab .- Tonkin.

16. FREYI, Bav. & Dtz.

Clausilia Freyi, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 44, pl. ii, fig. 5.

Hab.—Cho-Moi.

17. GASTRODES, MIldff. (Pl. III, Fig. 10.)

Phædusa (Hemiphædusa) gastrodes, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 78.

Hab .- Mauson Mts.

18. GASTRUM, Mlldff. (Pl. III, Fig. 6.)

Phædusa (Hemiphædusa) gastrum, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 77.

Hab.—Than-Moi.

Subsp. ventriculus, Mlldff.: loc. cit., p. 78.

19. Gereti, Bav. & Dtz.

Clausilia Gereti, Bavay & Dautzenberg: Journ. de Conchyl., 1900, vol. xlviii, pp. 115, 447, pl. x, fig. 8.

Hab.—Bac-Kan.

20. GIARDI, H. Fisch.

Clausilia Giardi, H. Fischer: Bull. Sci. France Belgique, 1898, vol. xxviii, p. 323, pl. xviii, figs. 22-27. Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 50, pl. xii, fig. 2.

Hab.—Déo-Ma-Phuc; between Lang-Son and That-Ké (B. & D.).

21. GISOTA, Bav. & Dtz.

Clausilia gisota, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 280, pl. xii, fig. 4.

Hab.—That-Ké.

Subsp. PLATYLOMA, Mlldff.

Phædusa (Hemiphædusa) gisota, subsp. platyloma, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 79.

Hab.—Than-Moi.

22. Grangeri, Bav. & Dtz.

Clausilia Grangeri, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 46, pl. iii, fig. 8.

Hab.—Between Lang-Son and That-Ké, etc.

Subsp. APIOSTOMA, Mlldff.

Phædusa (Hemiphædusa) Grangeri, subsp apiostoma, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 78.

Hab.—Than-Moi.

Subsp. LYTEOSTOMA, MIldff.

Phædusa (Hemiphædusa) Grangeri, subsp. lyteostoma, Moellendorff: tom. cit., p. 79.

Hab.—Than-Moi.

23. Hamonvillei, Bav. & Dtz.

Clausilia Hamonvillei, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 295, pl. xii, fig. 14, with var. obsoleta.

Hab.—Bac-Kan.

24. Houssayi, H. Fisch.

Clausilia Houssayi, H. Fischer: Bull. Sci. France Belgique, 1898, vol. xxviii, p. 325, pl. xvii, figs. 32–36.

Hab.—Déo-Mao-Phue; Cao-Bang.

25. Lemyrei, Bav. & Dtz.

Clausilia Lemyrei, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 275, pl. xii, fig. 1.

Hab.—Than-Moi (F.).

26. LYPRA, Mab.

Clausilia lypra, Mabille: Bull. Soc. Malac. France, 1887, vol. iv, p. 117.

Hab.—Tonkin.

27. Mausonensis, Mlldff., nom. emend. (Pl. III, Fig. 9.)

Phædusa (Rufospira) Mausonensis, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 76.

Hab.—Mauson Mts.

28. Messageri, Bav. & Dtz.

Clausilia (Pseudonenia) Messageri, Bayay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 46, pl. iii, fig. 1.

Hab.—Between Lang-Son and That-Ké.

29. оритпацморнама, Мав.

Clausilia ophthalmophana, Mabille: Moll. Tonk. diagn., 1887, p. 17; Bull. Soc. Malac. France, 1887, vol. iv, p. 119, pl. iii, figs. 4, 5.

Hab.—Than-Moi (F.).

Mabille gives ophthalmoriea in the explanation of the plate.

30. ORIENTALIS, Mab.

Nenia orientalis, Mabille: Moll. Tonk. diagn., 1887, p. 17; Bull. Soc. Malac. France, 1887, vol. iv, p. 108.

Hab.—Lang-Son, Than-Moi (F.).

31. PAVIEI, Morlet.

Clausilia Paviei, Morlet: Journ. de Conchyl., 1892 [?1893], vol. xl, p. 319, pl. vii, fig. 1.

Hab.—Than-Moi.

32. POLYDONA, Mab.

Clausilia polydona, Mabille: Moll. Tonk. diagn., 1887, p. 15; Bull. Soc. Malac. France, 1887, vol. iv, p. 114.

Hab.—Tonkin.

33. RHOPALOIDES, Mlldff. (Pl. III, Fig. 4.)

Phædusa (Oospira) rhopaloides, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 115.

Hab.—Islands Madeleine and De la Table.

Subsp. LEPTOSPIRA, Mlldff. (Pl. III, Fig. 1.)

P. rhopaloides, subsp. leptospira, Moellendorff: tom. cit., p. 116. Hab.—I. Madeleine.

Subsp. MICROTHYRA, Mlldff. (Pl. III, Fig. 7.)

P. rhopaloides, subsp. microthyra, Moellendorff: tom. eit., p. 116. Hab.—I. de la Table, Mauson Mts., I. of Bah-Mun (F.).

Subsp. Kebavica, Mlldff.

P. rhopaloides, subsp. Kebavica, Moellendorff: tom. cit., p. 116. Hab.—I. Kebao.

34. RUMINIFORMIS, Mab. (Pl. III, Fig. 8.)

Clausilia ruminiformis, Mabille: Moll. Tonk. diagn., 1887, p. 16; Bull. Soc. Malac. France, 1887, vol. iv, p. 112.

Hab.—Than-Moi (F.).

35. SEMIPOLITA, Bav. & Dtz.

Clausilia semipolita, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 288, pl. xii, fig. 9.

Hab.—Between Bac-Kan and That-Ké.

36. STENOTHYRA, MIldff. (Pl. III, Fig. 2.)

Phædusa (Pseudonenia) stenothýra, Moellendorff: Nachrbl. Deutsch. Malak. Ges., 1901, p. 116.

Hab.—I. Kebao.

37. Sykesi, Bav. & Dtz.

Clausilia Sykesi, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 293, pl. xii, figs. 12, 13, with var. major. Hab.—Between Cho-Moï and Bac-Kan.

38. THATKEANA, Bav. & Dtz.

Clausilia Thatkeana, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 285, pl. xii, fig. 7, with vars. obesa, minor. Hab.—Near That-Ké.

39. THERISTICA, Mab.

Clausilia theristica, Mabille: Moll. Tonk. diagn., 1887, p. 15; Bull. Soc. Malac. France, 1887, vol. iv, p. 118.

Hab.—Tonkin.

40. VANBUENSIS, Bav. & Dtz.

Clausilia Vanbuensis, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 38, pl. ii, fig. 1.

Hab.—Route from Son-La to Van-Bu.

41. VATHELETI, Bav. & Dtz.

Clausilia Vatheleti, Bavay & Dautzenberg: Journ. de Conchyl., 1899, vol. xlvii, p. 39, pl. ii, fig. 2.

Hab.—Van-Bu.

42. CLAUSILIA CHIEMHOAENSIS, n.sp. (Pl. III, Fig. 5.)

Testa fusiformis, subrimata, sinistrorsa, solida, eastaneo-brunnea, apice obtusulo. Anfr. 10-101, primi convexiusculi, reliqui fere plani, dense subtiliter filo-striati, sutura distincta sejuncti. medioeris, ovato-quadrata; peristoma continuum, modice solutum, valde incrassatum et reflexum, albidum. Lamellæ modicæ, superior verticalis, marginalis, inferior intus incrassata, rapide ascendens, subcolumellaris emersa. Plica principalis longa, lunella arcuata. Alt. 20·5, diam. max. 5 mm.; alt. apert. 5, lat. apert. 4 mm.

Hab.—Chiem-Hoa (H. Fruhstorfer).

This species recalls in form C. Thatkeana. It may be conveniently separated from it by its much smaller size, and by the white lip; the lamella inferior also is thicker and ascends more rapidly into the shell; the mouth is also more contracted.

EXPLANATION OF PLATE III.

- Fig. Clausilia rhopaloides, Mlldff., var. leptospira, Mlldff., , stenothyra, Mlldff. 1.
- ,,
- 3. diploeheilus, Mlldff. ,, 22
- rhopaloides, Mlldff. 4. ,, ,,
- 5. Chiemhoaensis, n.sp. ,, ,,
 - 6. gastrum, Mlldff. ,,
- ,, rhopaloides, Mlldff., var. microthyra, Mlldff. ,,
- ruminiformis, Mabille. 8. 22
- 9. Mausonensis, Mlldff. 22
- 10. gastrodes, Mlldff.